WE CLAIM:

1. A method for identifying an agent that modulates T lymphocyte development or function, the method comprising assaying a cellular activity of an inositol 1,4,5-trisphosphate 3-kinase (IP3K) or a fragment thereof in the presence of a test compound to identify a modulating agent that modulates the cellular activity of the IP3K.

2. The method of claim 1, further comprising testing the identified modulating agent for ability to modulate T cell differentiation.

3. The method of claim 1, wherein the IP3K is an IP3KB.

4. The method of claim 1, wherein the modulating agent inhibits kinase activity of the IP3K.

5. The method of claim 2, wherein the further testing comprises examining the agent's ability to inhibit development of $CD4^+$ $CD8^+$ T cells into $CD4^+$ or $CD8^+$ mature T cells.

6. The method of claim 3, wherein the IP3KB has an amino acid sequence of Accession No. CAB65055, Accession No. CAC40660, Accession No. NP_002212 or SEQ ID NO: 1, or that is substantially identical to any of these sequences.

7. The method of claim 3, wherein the IP3KB is encoded by a polynucleotide having a nucleotide sequence of SEQ ID NO: 2, 3, or 4, or that is substantially identical to any of these sequences.

8. The method of claim 4, wherein the kinase activity is to catalyze conversion of inositol 1,4,5-triphosphate (IP3) to inositol 1,3,4,5-tetrakisphosphate (IP4).

9. The method of claim 1, wherein the modulating agent decreases cellular levels of the IP3K in a cell.

10. The method of claim 9, wherein the cell is selected from the group consisting of thymus cell, $CD4^+$ $CD8^+$ T cell, $CD4^+$ T cell, $CD8^+$ T cell, and NK cell.

11. The method of claim 9, wherein the modulating agents inhibit expression of a gene encoding the IP3K.

12. A method for identifying an agent that modulates T lymphocyte differentiation, the method comprising:

(a) assaying a cellular activity of an inositol 1,4,5-trisphosphate 3-kinase (IP3K) or a fragment thereof in the presence of a test agent to identify one or more modulating agents that modulate the cellular activity of the IP3KB; and

(b) testing one or more of the modulating agents for ability to modulate T lymphocyte development or function; thereby identifying an agent that modulates T lymphocyte differentiation.

13. The method of claim 12, wherein the IP3K is an IP3KB.

14. The method of claim 12, wherein the modulating agents inhibit kinase activity of the IP3K.

15. The method of claim 14, wherein the kinase activity is to catalyze conversion of inositol 1,4,5-triphosphate (IP3) to inositol 1,3,4,5-tetrakisphosphate (IP4).

16. The method of claim 12, wherein the modulating agents are tested for ability to inhibit CD4+ CD8+ T cell development into CD4+ or CD8+ T cells.

17. A method for suppressing an undesired T lymphocyte response in a subject, the method comprising administering to the subject an effective amount of an agent that inhibits a cellular activity of an IP3K; thereby suppressing T lymphocyte response in the subject.

18. The method of claim 17, wherein the IP3K is an IP3KB.

19. The method of claim 17, wherein the agent inhibits kinase activity of the IP3K.

20. The method of claim 17, wherein the agent decreases cellular levels of the IP3K.

21. The method of claim 17, wherein the subject suffers from an autoimmune disease or graft rejection.

22. The method of claim 21, wherein the autoimmune disease is systemic lupus erythematosus (SLE), rheumatoid arthritis (RA), or multiple sclerosis (MS).

23. A method for modulating T lymphocyte differentiation in a subject, the method comprising (a) screening test compounds to identify a modulating agent that modulates a cellular activity of an IP3K, and (b) administering to the subject a pharmaceutical composition comprising an effective amount of the modulating agent; thereby modulating T lymphocyte differentiation in the subject.

24. The method of claim 23, wherein the IP3K is an IP3KB.

25. The method of claim 23, wherein the modulating agent inhibits kinase activity of the IP3K.

26. The method of claim 25, wherein the subject suffers from an autoimmune disease or graft rejection.

27. The method of claim 23, wherein the subject suffers from inflammation, graft versus host disease, psoriasis, or allergy.